

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Prunus armeniaca*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2-METHYL-BUTYRIC-ACID	Plant	--	--		
3	3,4-DIHYDROXYBENZOIC-ACID	Fruit	--	--		
16	ACETIC-ACID	Essential Oil	--	--		
3	ALANINE	Fruit	680	4980	0.5001282804322874	USDA's Ag Handbook 8 and sequelae)
2	ALPHA-CRYPTOXANTHIN	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
0	ALPHA-ESTRADIOL	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
23	ALPHA-TERPINEOL	Essential Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	AMYGDALIN	Seed	80000	80000	1.2651227331520287	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	AMYLASE	Fruit	--	--		
14	ARGININE	Fruit	450	3300	-0.2693413185789777	USDA's Ag Handbook 8 and sequelae)
112	ASCORBIC-ACID	Fruit	100	745	-0.23816714589031257	USDA's Ag Handbook 8 and sequelae)
0	ASH	Seed	10000	30000	-0.537791441673595	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ASH	Fruit	7000	105000	1.2516837227858475	USDA's Ag Handbook 8 and sequelae)
3	ASPARTIC-ACID	Fruit	3140	23000	1.6870570762026067	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	BENZYL-ALCOHOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
53	BETA-CAROTENE	Fruit	13	189	0.21453296561386564	
53	BETA-CAROTENE	Seed	--	--	-0.42930857989782434	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	BETA-GLUCOSIDASE	Seed	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
47	BETA-SITOSTEROL	Seed	--	--		
47	BETA-SITOSTEROL	Fruit	160	1300	0.9138041966734828	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	BORON	Fruit	1	70	0.6054595930630678	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
102	CAFFEIC-ACID	Plant	--	--		
28	CALCIUM	Fruit	134	1899	-0.45166414201001837	
28	CALCIUM	Seed	930	1522	-0.4819953355501007	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
0	CALCIUM-PECTATE	Fruit	10000	10000	-0.9464458343267658	
2	CAMPESTEROL	Seed	--	--		
2	CAMPESTEROL	Fruit	10	100	0.18983396788539855	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CAPRONIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	CARBOHYDRATES	Fruit	111200	873000	0.48190898123765197	USDA's Ag Handbook 8 and sequelae)
0	CARBOHYDRATES	Seed	140000	140000	-1.523718144790433	
1	CATECHINS	Fruit	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
77	CHLOROGENIC-ACID	Fruit	--	--		
1	CHOLESTEROL	Seed	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	CIS-EPOXYDIHYDROLINALOL	Plant	--	--		
0	CIS-EPOXYDIHYDROLINALOOL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
23	CITRIC-ACID	Fruit	--	--		
12	COPPER	Seed	1	16	0.10753302142111128	
0	CYANIDE	Seed	20	2000		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
7	CYANIDIN	Plant	--	--		
2	CYSTINE	Fruit	30	220	-0.8462916858595124	USDA's Ag Handbook 8 and sequelae)
0	DELTA-24-CHOLESTEROL	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	DELTA-OCTALACTONE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	DEXTROSE	Seed	81000	116000	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	EMULSIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	ENT-EPIAFZELECHIN-3-O-P-HYDROXYBENZOATE-(48,207)-EPIAFZELECHIN	Root	--	5		Prasad, D., Joshi, R. K., Pant, G., Rawat, M. S. M., Inoue, K., Shingu, T., 1998. An A-Type Proanthocyanidin from <i>Prunus armeniaca</i> . <i>J. Nat. Prod.</i> , 61 (9): 1123-1125.
0	EO	Seed	8000	16000	-0.3482296375405711	
12	ESTROGENS	Fruit	--	900		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
8	ESTRONE	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FAT	Fruit	2200	41000	-0.3280973877130875	USDA's Ag Handbook 8 and sequelae)
0	FAT	Seed	400000	514000	1.3095304853919276	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	FIBER	Fruit	6000	132000	-0.09131098455647849	USDA's Ag Handbook 8 and sequelae)
15	FIBER	Seed	33000	33000	-0.8036629669867905	
0	FLAVOXANTHIN	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
15	FOLACIN	Fruit	0.07	0.7	-0.5504340756407867	USDA's Ag Handbook 8 and sequelae)
8	FRUCTOSE	Fruit	14000	42000	-0.25803537010785266	
0	GAMMA-CAPRALACTONE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	GAMMA-CAPROLACTONE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
2	GAMMA-CAROTENE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	GAMMA-DECALACTONE	Plant	--	--		
13	GERANIAL	Essential Oil	--	--		
35	GERANIOL	Essential Oil	--	--		
7	GLUCOSE	Fruit	32000	48000	-0.38566030922181593	
8	GLUTAMIC-ACID	Fruit	1570	11500	-0.13522886191273067	USDA's Ag Handbook 8 and sequelae)
12	GLYCINE	Fruit	400	2930	-0.26095447503067815	USDA's Ag Handbook 8 and sequelae)
0	GLYCOSIDES	Fruit	--	150	-1	
0	GLYCOSIDES	Leaf	29000	36000	1.404944977209334	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	HCN	Seed	2000	2920	-0.28013580738592153	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
7	HISTIDINE	Fruit	270	1980	0.18747262732122505	USDA's Ag Handbook 8 and sequelae)
30	HYPEROSIDE	Fruit	--	--		
0	INVERTASE	Fruit	--	--		
12	IODINE	Fruit	0.05	0.05	-0.2904687631626604	
6	IRON	Seed	42	48	-0.47760825095072074	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, <i>Shoykugaku Zasshi</i> 36(3):190-195.
6	IRON	Fruit	5	79	-0.2141164748349134	
2	ISOBUTYRIC-ACID	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
3	ISOLEUCINE	Fruit	410	3000	-0.191561516631753	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
22	ISOQUERCITRIN	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
75	KAEMPFEROL	Leaf	--	--		
75	KAEMPFEROL	Fruit	--	--		
0	KAEMPFEROL-3-O-GALACTOSIDE	Plant	--	--		
0	KAEMPFEROL-3-O-GALACTOSIDE	Fruit	--	--		
0	KAEMPFEROL-3-O-GLUCOSIDE	Plant	--	--		
0	KAEMPFEROL-3-O-RUTINOSIDE	Leaf	--	--		
0	KILOCALORIES	Fruit	480	3515	-0.22106834715945367	USDA's Ag Handbook 8 and sequelae)
2	LEUCINE	Fruit	770	5640	0.11455315804887445	USDA's Ag Handbook 8 and sequelae)
60	LIMONENE	Essential Oil	--	--		
0	LINALOL	Fruit	--	--		

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53	LINALOOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
27	LINOLEIC-ACID	Fruit	770	5640	-0.27582802584947747	USDA's Ag Handbook 8 and sequelae)
27	LINOLEIC-ACID	Seed	56000	411200	2.6053688076321877	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	LUTEIN	Fruit	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
16	LYCOPENE	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	LYSINE	Fruit	970	7105	0.7745283702955714	USDA's Ag Handbook 8 and sequelae)
0	M-INOSITOL	Plant	--	--		
65	MAGNESIUM	Fruit	76	615	-0.7014111637690807	USDA's Ag Handbook 8 and sequelae)
65	MAGNESIUM	Seed	1750	1750	-0.47257280685396186	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
15	MALIC-ACID	Fruit	7000	22000	0.4805430093828897	
14	MANGANESE	Seed	1	11	-0.5296776809784071	
15	METHIONINE	Fruit	60	440	-0.638521474807996	USDA's Ag Handbook 8 and sequelae)
13	MUFA	Fruit	170	1245	-0.2358811164316707	USDA's Ag Handbook 8 and sequelae)
22	MYRCENE	Essential Oil	--	--		
2	NEO-CHLOROGENIC-ACID	Fruit	--	--		
2	NEO-CHLOROGENIC-ACID	Seed	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
39	NIACIN	Fruit	6	61	0.004035702508433525	USDA's Ag Handbook 8 and sequelae)
39	NIACIN	Seed	17	17	-0.7748758974183192	
18	OLEIC-ACID	Seed	248000	411200	2.4012052233792365	
18	OLEIC-ACID	Fruit	170	1245	-0.4711495293102127	USDA's Ag Handbook 8 and sequelae)
25	P-COUMARIC-ACID	Plant	--	--		
16	P-CYMENE	Leaf	--	--		
13	PALMITIC-ACID	Fruit	240	1760	-0.3381361322441793	USDA's Ag Handbook 8 and sequelae)
1	PANGAMIC-ACID	Seed	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	PANTOTHENIC-ACID	Fruit	2.4	17.6	-0.03217668277828292	USDA's Ag Handbook 8 and sequelae)
7	PHENYLALANINE	Fruit	520	3810	0.16793014424265534	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Fruit	180	2982	-0.07107348620689122	USDA's Ag Handbook 8 and sequelae)
4	PHOSPHORUS	Seed	3000	3000	-0.6218948696821971	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Fruit	180	1320	0.4826225434926733	USDA's Ag Handbook 8 and sequelae)
30	POLYPHENOLS	Fruit	--	5000	-1.2373884178745287	
14	POTASSIUM	Seed	4180	7783	-0.42099037622840496	
14	POTASSIUM	Fruit	2824	22565	0.41126901443161773	USDA's Ag Handbook 8 and sequelae)
34	PROANTHOCYANIDINS	Fruit	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
0	PROLINE	Fruit	1010	7400	0.9314338519400758	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Fruit	10000	127000	0.2346146816613861	USDA's Ag Handbook 8 and sequelae)
0	PROTEIN	Seed	315000	315000	0.7223510331064014	
4	PUFA	Fruit	770	5640	-0.43576979066822263	USDA's Ag Handbook 8 and sequelae)
176	QUERCETIN	Plant	--	--		
176	QUERCETIN	Fruit	--	--		
0	QUERCITIN	Fruit	--	--		
0	QUERCITIN-3-DIGLUCOSIDE	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	QUERCITIN-3-GALACTOSIDE	Plant	--	--		
0	QUERCITIN-3-GLUCOSIDE	Plant	--	--		
0	QUERCITIN-3-RHAMNOSIDE	Plant	--	--		
0	QUERCITIN-3-RUTINOSIDE	Plant	--	--		
44	QUERCITRIN	Fruit	--	--		
1	QUINIC-ACID	Fruit	--	--		
15	RIBOFLAVIN	Fruit	0.4	4.4	-0.13049159964877638	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Seed	5.3	5.3	0.6805763273134317	
1	RUBIXANTHIN	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
87	RUTIN	Leaf	17700	17700	0.09431069830225612	
87	RUTIN	Fruit	--	--		
7	SALICYLATES	Fruit	10	260	0.40879863957308094	
1	SERINE	Fruit	830	6080	0.8603871043309238	USDA's Ag Handbook 8 and sequelae)
0	SFA	Fruit	270	1980	-0.3356686979392271	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	SODIUM	Fruit	10	88	-0.17560584528780673	USDA's Ag Handbook 8 and sequelae)
1	SODIUM	Seed	18	19	-0.6855554642967485	Suzuki, A., Morimoto, I., and Okitsu, T., Elution of Metals from Crude Drugs, Shoykugaku Zasshi 36(3):190-195.
11	SORBITOL	Plant	--	--		
10	SQUALENE	Seed	200	200	-0.0989573644161303	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
8	STEARIC-ACID	Fruit	30	220	-0.26463148399299935	USDA's Ag Handbook 8 and sequelae)
7	SUCCINIC-ACID	Fruit	--	--		
14	SUCROSE	Fruit	14000	54000	-0.3639418988772142	
35	TANNIN	Fruit	600	1000	-0.9020326843424801	
6	TARTARIC-ACID	Fruit	--	--		
9	TERPINOLENE	Essential Oil	--	--		
31	THIAMIN	Fruit	0.3	2.5	-0.3626018283442436	USDA's Ag Handbook 8 and sequelae)
31	THIAMIN	Seed	1.5	1.5	-1.2129918354928821	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	THREONINE	Fruit	470	3445	0.17762624953924613	USDA's Ag Handbook 8 and sequelae)
4	TRANS-2-HEXENAL	Essential Oil	--	--		
0	TRANS-EPOXYDIHYDROLINALOL	Fruit	--	--		
0	TRANS-EPOXYDIHYDROLINALOOL	Fruit	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
29	TRYPTOPHAN	Fruit	150	1100	0.3502346671803925	USDA's Ag Handbook 8 and sequelae)
8	TYROSINE	Fruit	290	2125	-0.12171200983539862	USDA's Ag Handbook 8 and sequelae)
3	VALINE	Fruit	470	3445	-0.20797823150335815	USDA's Ag Handbook 8 and sequelae)
24	VANILLIC-ACID	Fruit	--	--		
0	VIT-B-6	Fruit	0.5	4	-0.7070236337221133	USDA's Ag Handbook 8 and sequelae)
0	WATER	Fruit	963500	963500	0.8388527558568569	USDA's Ag Handbook 8 and sequelae)
3	XYLOSE	Plant	--	--		
77	ZINC	Seed	2	38	-0.20248035050833735	